Volume 19, Edition 2 February 2015

Valley of the Moon Amateur Radio Club WIRELESS

FRANKLY SPEAKING!

By the time your reading this, K1N will be in the bag. Congrats to Jim K6UUW for working more band slots than me! The pileups were amazing.

I remember when I first joined VOMARC in July of 1992, I couldn't imagine how you could get so busy to not have time for the radio...now I've come full circle and appreciate working the expedition at all! We've got to get Natalia on the air! Once she's licensed, I can see the ham radio time and budget expanding...

This month's meeting will feature Steve Fischer K6ETA who will present Raspberry PI used for PACKET NODES AND TNCs. Should be the bees knees.

We'll meet up at the Black Bear at 6pm meeting night for a bite before the meeting.

If anyone has ideas of topics for meetings, feel free to drop me a line. I could watch dxpedition videos forever, but I'm sure the rest of you would probably have other preferences, let me know!

Keep your aerials resonant and amps tuned.

—73, Frank W6GN

VE Report

The club held a VE session on Jan 31 at the Sonoma PD EOC.

We had four candidates and all passed. Two were upgrades to general. One woman went from Tech to Extra. I think her physics degree helped.

Our next session is at the Hamfest in April.

Thanks to Alan, San, Gordon and Ken Rawles for participating.

For all the tech's, think about the upgrade to general.

—Jim K6UUW, VE coordinator.

MINUTES OF THE JANUARY 21, MEETING

Meeting was called to order at 7:28ish PM by our new Imperious Leader and President, Frank Wiebusch, KG6N

Members present at the meeting were: KD6FIL (Dave), KJ6EIG (Bill), NJ6E (Stan), K6UUW, (Jim), N7PIB (San), KJ6QIQ (Scott), K6KLL (Alan), KA2QQO (Declan), WB6TMH (Mike), W1EJ (Ed), KG6QNT (Eileen), W5LTP (Sam), WD6BOR (Darrel), KI6JNU (Moe), KG6N (Frank),

Guest: N6YEU (Fred).

Minutes were missing in action… The last official meeting was in November.

Report from officers:

President: Present and accounted for and running the show!!! Steve Moscony called from Redding and said that we have the old Hamfest flyer on the Webpage and we need to update it for 2015.

Vice President: Nothing to report.

Treasurer: We have received $240 in dues so far for 2015 and we have $2306.61 in the bank.

Secretary: The insurance certificates still need to be requested naming the City and the County on the insurance certificates for the Hamfest.

ACS: Level 1 training is scheduled for April 4 and October 3. There is a Unit leader meeting on January 26.

Radio Officer: The Astron35 power supply got a new switch and is operational and in the EOC Radio Room.

Website: Needs to have the net controls updated. The Hamfest flyer needs to be updated and the meeting locations need to reflect that we can no longer use McDougal Hall.

Old Business

Mystery Box: The mystery box made its way back to the meeting. K6UUW was the lucky winner of the Mystery box this month.

Young Eagles: There was a Young Eagles Event on January 11, but it was fogged in and no one went flying. We did set up the demonstration station. It was COLD!!! The next one is February 8 (Weather Permitting).

New Business

Tubes Sold: WD6BOR found someone to buy all the club's tubes. They need to be packaged up and the buyer will pay $1200 for the entire lot and will pay for shipping. There will be a tube packing party on January 24.

Hamfest: The Hamfest is set for April 25 and a notice has been sent to the ARRL to publish in QST.

Next Month's Meeting Presentation: Steve Fischer will present his Packet Node setup using a Raspberry Pi computer.

The meeting was adjourned at 1943ish PM. (The new President runs a fast meeting!)

The meeting presentation was Fred, N6YEU, talking about his experiences operating the CalQSO party from various locations around the north state. Great Photos!

—Respectfully submitted by Dave KD6FIL

NEXT MEETING
Wed, February 18, 2015, 7:30pm
City of Sonoma EOC

Word From Navassa: Turn Off Those Speech Processors! K1N Tops 100,000 Contacts

The pressure to work K1N on Navassa Island continues. The DXpedition has topped 100,000 contacts, but demand seems insatiable, as it enters its final few days. The pileups continue to be

K1N team member Glenn Johnson, W0GJ.

fierce with little letup, K1N team member Glenn Johnson, W0GJ, said in a February 10 media release. A day earlier, during a satellite telephone interview with Wolf Harranth, OE1WHC, Johnson advised phone operators to turn off their speech processors when trying to break the pileups. He said the splatter generated when phone ops max out their audio in an effort to be heard "makes it almost impossible" to pick out individual callers.

"If we could somehow magically eliminate all speech processors, we could probably double or triple our rate, particularly in working Europeans," Johnson told OE1WHC.

Johnson said the distribution of K1N contacts forms "almost a bell-shaped curve centered on 20 and 30 meters," although, he added, 40 meters has been "very productive" as well. On the outer edges, K1N had logged more than 2500 contacts on 160 as of February 9 and has been working stations in Oceania and Europe on 6 meters, where K1N has been maintaining a beacon on 50.103 MHz.

Johnson said the team will continue to operate full bore into the early weekend but will start closing down on Friday, February 13, sending unneeded supplies back to Jamaica.

K1N CW operator Ralph Fedor, K0IR, works down a pileup.

(from ARRL newsletter)

—Submitted by Jim K6UUW

"Gray Radio Gang" Reactivates Vintage Battleship *Iowa* HF Transmitter

It's a massive project on a number of levels, but the so-called "Gray Radio Gang" that's been working to restore some of the vintage US Navy radio gear on board the Battleship *Iowa* (BB-61), docked in Los Angeles, recently fired up one of the vessel's transmitters for the first time in about 25 years. Restoration team member Jim Jerzycke, KQ6EA, recounted on his "Every Blade of Grass" blog how the group was finally able to get 950 W into a dummy antenna from one transmitter on 20 meters.

"We still have quite a way to go before we attempt to put one [transmitter] on the air, but the results were quite encouraging for at transmitter that was last powered up sometime in 1990," Jerzycke said in his blog. "BB-61 should be on the air later this year with a *big*voice!"

He told ARRL that, once transmitters are deemed operational, they probably would not be used very often on the ham bands. The Iowa already has a ham radio station, NI6BB, under the auspices of the Battleship Iowa Amateur Radio Association (BIARA), an ARRL-affiliated club. BIARA's president is Doug Dowds, W6HB. NI6BB has more modern gear but makes use of the ship's own antennas.

One of the Battleship *Iowa*'s AN/URT-23(C) transmitters. The exciter is at the top, the PA is in the middle, and the amplifier power supply is on the bottom. [Jim Jerzycke, KQ6EA, photo]

(from ARRL newsletter)

—Submitted by Jim K6UUW

With Just a WSPR

—By Dan Romanchik, KB6NU

It's really amazing what you can do with computers in amateur radio, and there's been an explosion in the number of digital modes. One interesting mode that I've recently been introduced to is WSPR, which is short for Weak Signal Propagation Reporting. The protocol and the original WSPR program was written by Joe Taylor, K1JT, and is designed for sending and receiving low-power transmissions on the HF bands to test propagation paths.

I won't try to cover all the technical details here. There are several sites that cover them pretty well:

* Wikipedia: WSPR (http://en.wikipedia.org/wiki/WSPR_%28amateur_radio_software%29)

* G4ILO's Shack: WSPT - Distant Whispers (http://www.g4ilo.com/wspr.html)

I was introduced to WSPR by my friend, Joe, AC8ES. He posted a message to our club mailing list asking if anyone had a toroid core that he could buy to make a QRP balun for 10

MHz. When I asked what he was going to use it for, he said that he was making a WSPR transmitter with a Raspberry Pi, and the balun was for the dipole he built for it. He said that he'd gotten roped into doing this because he'd attended a local Raspberry Pi users' group, and when he mentioned he was an amateur radio operator, they encouraged him to try this project.

How could I refuse a request like that? I have a whole kit of ferrite cores, and after some back and forth, we found a small core that he could use.

The software he chose is WsprryPi (https://github.com/JamesP6000/WsprryPi). It's described a "Raspberry Pi transmitter using NTP-based frequency calibration." It uses a GPIO port to generate WSPR signals anywhere from 0 to 250 MHz. Joe said that there are several Raspberry Pi programs that run WSPR, but that he chose this one because it seemed to have more features than the others.

Figure 1 shows Joe's setup. Since the output generates a square wave, a low-pass filter is needed to filter out the high-frequency components. As you can see, the GPIO output is fed through a 0.1uF decoupling capacitor into a Mini-Circuits 10.7MHz low-pass filter, then to a 1:1 balun, which is connected directly to the dipole elements.

Joe says, "The antenna is just a dipole taped up to the walls of my living room and hallway." As you can see he made the balun and dipole from 24 ga speaker wire.

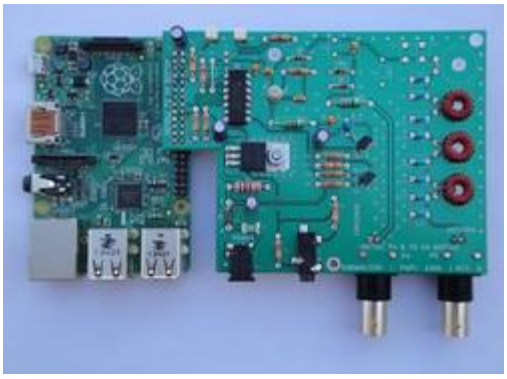
The performance of this setup has been kind of amazing. In one e-mail, Joe reported, "Your toroid seems to be working well. Got the balun and antenna finished and executed seven WSPR transmissions from the Raspberry Pi. The WSPR reporting website WSPRnet (http://wsprnet.org) came back with a couple dozen reception reports; typical distance is ~300+ miles, max was 593 miles." In a second e-mail, Joe writes, "Did a few more beacon transmissions and checked the WSPR signal reports again. Someone picked up my 5 mW signal from 1010 miles away in Canada."

Joe's turned into quite a WSPR fan. He's even written an Android app - WSPRnet Viewer (https://play.google.com/store/apps/details?id=com.glandorf1.joe.wsprnetviewer.app) to retrieve and displays report from www.wsprnet.org. Tapping on a specific report displays more details about it, along with a world map that shows transmitter and receiver locations.

Unfortunately, I don't have a Raspberry Pi, or I'd try this as well. I do have a BeageBone Black, but there doesn't seem to be software that I can download and install as easily as the Raspberry Pi software. That being the case, this might be a good excuse to purchase one of those new, cheaper RPis.

When he's not digging through his junk box or teaching amateur radio classes, KB6NU writes about amateur radio at KB6NU.Com. He has just released The CW Geek's Guide to Having Fun with Morse Code. The book is available on Amazon.Com or on KB6NU.Com.

NEW SDR RADIO



What's a SkyPi-40? Turns out it's a Raspberry Pi-based SDR transceiver which supports RTTY, CW, WSPR, and other FSK modes with 1 watt of output power! Read all about it in the latest issue of the DKARS Magazine.

(from ARRL Contest newsletter)

—Submitted by Jim K6UUW

What could possibly go wrong?

THE VOMARC WIRELESS

VOLUME 19 EDITION 2

A publication of VOMARC, the Valley of the Moon Amateur Radio Club – W6AJF

Frank C. Jones – W6AJF
Honorary President in Perpetuity

CAST OF CHARACTERS

Frank Wiebusch KG6N — President

Scott Wellington KJ6QIQ —Vice President

Dave Dammuller, KD6FIL – Secretary

Eileen Adams, KG6QNT – Treasurer

Mike Miller, WB6TMH – Radio Officer

Ken McTaggart, N6KM – ACS Unit Leader

Sanford Smith, N7PIB – VE Liaison

Jim Hill, K6UUW – Elmer Coordinator, Training Officer, President Emeritus

Ken McTaggart, N6KM – Station Trustee for W6AJF

Eileen Adams, KG6QNT – Webmeistress, Editor

Receipt of the Wireless is one of the most sought after benefits of membership in VOMARC—S. Marler.

CLUB MEETINGS are held on the third Wednesday of each month at the City of Sonoma Police Department EOC 175 1st St West. Meetings start at 19:30 local (7:30 P.M.).

WEB PAGE: http://www.vomarc.org/

Nets are held every Wednesday night at 19:30 (7:30 P.M.) local, except meeting nights on the 145.350 repeater, -600 kHz, PL 88.5 Hz.

ACS holds a net each Monday evening at 19:30 local on the 146.205, +600, PL 88.5 Hz repeater.

PACKET STATION INFO: The VOMARC packet station is off the air until further notice.

CLUB BREAKFASTS are held on the first Saturday of each month at Palms Grill (formerly Issa's) Restaurant, 18999 Sonoma Highway, Sonoma. The fun starts at 09:30 local.

Comments and submissions of material may be sent to:

Eileen@vom.com

Valley of the Moon ARC, Inc.

C/O Sonoma Police Department
175 First Street West
Sonoma, CA 95476

2015 ACS
Net Control Assignments

	Name	Call
JANUARY	MOE	KI6JNU
FEBRUARY	SCOTT	KJ6QIQ
MARCH	MOE	KI6JNU
APRIL		
MAY		
JUNE		
JULY		
AUGUST		
SEPTEMBER	SAM	W5LTP
OCTOBER		
NOVEMBER	MIKE	WB6TMH
DECEMBER	DARREL	WD6BOR

2015 VOMARC
Net Control Assignments

	Name	Call
JANUARY	SCOTT	KJ6QIQ
FEBRUARY	JIM	K6UUW
MARCH	MOE	KI6JNU
APRIL	DAVE	KD6FIL
MAY		
JUNE		
JULY		
AUGUST		
SEPTEMBER	SAM	W5LTP
OCTOBER	FRANK	KG6N
NOVEMBER	MIKE	WB6TMH
DECEMBER	DARREL	WD6BOR

THE NEXT MEETING WILL BE THE FEBRUARY 18, 7:30PM AT THE CITY OF SONOMA EOC, 175 1ST ST WEST, SONOMA
SEE YOU THERE.

VOMARC MEMBERSHIP

VOMARC 2015 Membership Dues: $15/year individual; $5/year family member at same address.

VOMARC encourages its members to join the ARRL. More information is available at www.arrl.org.
QST is available to blind and physically handicapped individuals on audio cassette from the Library of Congress, National Library Service for the Blind and Physically Handicapped. Call 1-800-424-8567.

Name:_____ CALL: _____ EMAIL: _____

Address: _____ APT: _____

City: _____ State: _____ ZIP:_____

Name:_____ CALL: _____ EMAIL: _____

Name:_____ CALL: _____ EMAIL: _____

VOMARC: $ _____ Complimentary with Class--Date:_____

Membership Moment, From the Database Queen

Dues may be mailed to VOMARC in care of the Sonoma Police Department, 175 1st St West, CA 95476, or brought to the next meeting.

Your check should be made payable to: **VOMARC.**